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WHAT IS CLAIMED IS:

- Sub a2
1. A VEGF antagonist molecule comprising a variant vascular endothelial growth factor polypeptide, said variant polypeptide comprising an amino acid modification of at least one cysteine residue, wherein said amino acid modification inhibits the ability of said variant polypeptide to properly dimerize with another vascular endothelial growth factor polypeptide monomer, wherein said antagonist molecule is capable of binding to vascular endothelial growth factor receptors without significantly inducing a vascular endothelial growth factor response, and functional derivatives of said antagonist molecule.

Sub E2

2. The antagonist molecule according to Claim 1 wherein said amino acid modification is a substitution of said at least one cysteine residue with a different amino acid which is incapable of participating in a disulfide bond.

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3. The antagonist molecule according to Claim 2 wherein said substitution is of the cysteine residue at amino acid position 51 and/or 60 of the native VEGF amino acid sequence.

Sub E3

4. The antagonist molecule according to Claim 3 wherein aspartic acid is substituted for cysteine.

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5. The antagonist molecule according to Claim 4 comprising the substitution C51D.

6. The antagonist molecule according to Claim 4 comprising the substitution C60D.

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7. The antagonist molecule according to Claim 1 wherein said amino acid modification is a chemical modification of said at least one cysteine residue which renders said cysteine residue incapable of participating in a disulfide bond.

8. The antagonist molecule according to Claim 7 wherein said chemical modification is of the cysteine residue at amino acid position 51 and/or 60 of the native VEGF amino acid sequence.

9. The antagonist molecule according to Claim 1 containing
5 further amino acid modifications that do not otherwise affect the essential biological characteristics.

10. An isolated nucleic acid sequence comprising a sequence that encodes the VEGF antagonist molecule of Claim 1.

11. A replicable expression vector capable in a transformant host
10 cell of expressing the nucleic acid of Claim 10.

12. Host cells transformed with the vector according to Claim 11.

13. Host cells according to Claim 12 which are Chinese hamster ovary cells.

14. A composition of matter comprising the VEGF antagonist
15 molecule according to Claim 1 compounded with a pharmaceutically acceptable carrier.

15. A method of treatment which comprises administering a composition according to Claim 14.

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